My name is Susan Kulis. I live at 87 Briarcliff Rd. in Hamden. I am here to express my strong approval for the move to ban crumb rubber in CT.

I'd like to give a little background on how crumb rubber came to be used on playing fields.

From SF Chronicle 2/21/15

EPA efforts to promote recycled tires on athletic surfaces date back to a 1991 agency report on various ways to reduce the nation's scrap tire stockpile. Why was there a scrap tire stockpile? Because they can't be put in landfills, one reason being they leach chemicals into the ground and pollute the water. From Environment and Human Health, Inc.: . Studies at tire reclamation sites report the leaching of similar sets of chemicals into the ground water. Using recycled tire material on playgrounds and sports fields, among other possibilities, had potential, the report noted.

By 2003, the agency had partnered with environmental agencies in California and other states and with rubber manufacturers to create the Scrap Tire Workgroup, which promoted the use of recycled tires and developed strategies to counter concerns about the toxicity and volatility of the material.

One strategy outlined in the Workgroup's 2007 marketing plan involved designating the EPA as the chief marketer to persistently promote the use of ground rubber while at the same time compiling and producing studies to respond to health and safety concerns over the material. Another strategy involved **encouraging** states to provide subsidies to cities and school districts that installed recycled tire material on playgrounds and athletic fields.

During the time the EPA was involved in the Scrap Tire Workgroup, the agency issued a 2009 study on the health effects of crumb rubber, saying it found low levels of concern even though it identified 30 compounds found in tires, including known carcinogens and toxic substances such as arsenic, lead and cadmium. But in 2013, the EPA backed off that earlier statement. The agency said its 2009 study

— often cited by industry groups to validate the safety of crumb rubber — was limited in scope and that no conclusions should be drawn by it.

The EPA now states "new data and analysis are **needed** about children's health risks from exposures. Communities that need to make decisions can consider **alternate** materials that are available."

Alongside the EPA, the Consumer Product Safety Commission has played a critical role in the turf-industry timeline. It issued guidance in 2008 regarding turf fields in a press release with the headline, "CPSC Staff Finds Synthetic Turf Fields OK to Install, **OK to Play On**."

After the CPSC study was published our then Attorney General Blumenthal sent out a damning press release regarding the inadequacy of the study. (present papers to commission).

Finally, in 2013, at a CPSC oversight hearing, Chairman Elliot Kaye said, "That 2008 release does not reflect my views of the state of play. It's also important to note: that 2008 statement did not even reflect the technical staff's views at the time. There was a political effort to state something that may not actually reflect the state of play. 'Safe to play on' means something to parents that I don't think we intended to convey and I don't think we should have conveyed."

In April 2015, WSB Atlanta TV reported "Chairman Elliot Kaye has deep concerns with the (2008) press release and it is not the agency's current position," Scott Wolfson, the Communications Director for the Consumer Product Safety Commission, told Channel 2's Rachel Stockman.- "What was done in 2008 was not good enough to make a claim either way as to the safety of those fields."

The turf industry has long promoted that both the EPA and CPSC endorse these fields as safe. So the 2 **governmental** studies that the turf industry cites as giving the go-ahead to the use of crumb rubber have now been reversed. What do they have to go on now?

From NH Register 1/26/16

The Connecticut Department of health has indicated the fields are safe, ACCORDING TO A STUDY THAT WAS REQUESTED FROM THEN-ATTORNEY GENERAL RICHARD BLUMENTHAL.

But we have seen that that study is no longer accepted as adequate. How can the DOH continue to recommend the use of crumb rubber under these circumstances? They should not in good conscience be recommending it, as the study that recommendation was based on has been withdrawn.

If your vote today is based on the recommendation of the DOH, please understand that the DOH is recommending a study that has been rescinded and is no longer applicable.

DOES A SYNTHETIC FIELD SAVE MONEY? WHAT ARE THE WARRANTY ISSUES? WHAT ABOUT PLAYER INJURIES? WHAT ABOUT PLAYER INFECTIONS?

I have taken this from the University of Arkansas, Division of Agriculture, Turfgrass Science Department:

## (Artificial) Turf vs. Natural Grass Athletic Fields READ HEADINGS

Their findings have been corroborated by Grassroots Environmental Education organization, Port Washington, NY Crumb rubber must be monitored and maintained. The crumb hardens and ossifies as it dries out. The rubber pellets eventually get as hard as rock. If it hardens beyond a certain point it can cause concussion or skull fracture. The nfl monitors their fields before every game. How often does Hamden monitor their field? Do they even know they should?

One of the ingredients in crumb rubber is carbon black. Carbon black is composed of nanoparticles. Nanoparticles are microscopic, but they pack a big punch.

I'm going to quote from an article in Turf and Recreation, a turf association from Canada, by Jim Novak.

The concern: Carbon black nanoparticles make up 30 per cent or more of car tires; the same tires that are pulverized for creating the tire crumb used on artificial turf playing fields. A study by the Queen's Medical Research Institute at the University of Edinburg/MRC Center for Inflammation Research in Scotland, showed that long, needle-thin carbon nanotubes could lead to lung cancer and inhaling carbon nanotubes could be as harmful as breathing asbestos.

The research scientists observed that long, thin carbon nanotubes look and behave like asbestos fibres, which have been shown to cause mesothelioma, a deadly cancer of the membrane lining the body's internal organs (particularly the lungs) and can take 30 to 40 years to appear following exposure.

Studies done on mice have found "asbestos-like pathogenicity" Yes, the black dust that flies into the air when a goalie slides may contain nano-sized carcinogenic carbon black dust particles sprinkled with heavy metals. These nanoparticles remain suspended in the air for WEEKS. Who is researching this? Carbon black has been classified as a carcinogen since 2003 by the State of California.

It could take up to 40 years before the effects of these nanoparticles can be seen. Can the turf companies now assure us it is safe?

Watch any youtube video of men laying crumb rubber field. They are sitting ahead, while the crumbs are being laid behind them. Why do they wear gas masks? ESPN E:60 Excerpt

For disposal purposes rubber tires are classified as either hazardous waste or special waste. They are too toxic to be included in landfills. Yet this substance with many known toxins and carcinogens is ground up, multiplying its surface area millions of times. Children roll around in it, inhale it, ingest it, have it rubbed on their skin, get it into their eyes, and THAT'S OKAY??? Too toxic for landfills, okay for human consumption.

Finally, I'm going to talk about Amy Griffin, the associate head coach for the women's soccer team at the University of Washington. She started compiling data on cancer diagnoses in student sports players in 2009. To date she has documented

187 cases of cancer, 150 of whom are soccer players, and 95 of whom are goalies. Who rolls around in crumb rubber the most?

Eighty of the athletes on Griffin's list have some form of lymphoma. Dr. David Brown, a public health toxicologist who spent over a decade working at the Centers for Disease Control and Prevention, has said, "You should never get more lymphomas than leukemias. Leukemias are the most prevalent cancer in that [younger] group, and [Amy's list] has more lymphomas ... her ratios are upside down."

When Brown was asked what that signaled to him, his response was, "It signals that there's a chemical involved. When I was with the Federal Government we would have called that AN OUTBREAK."

School districts in New York and California have banned crumb-rubber infill, largely because of the discovery of unsafe levels of heavy metals dumped into sportsfields.

I would like to ask you: If you had to cross a minefield and you were told they were pretty sure the minefield had been cleaned up, would you cross it or would you take a detour? Would you take the chance with your life? There is no way to test the safety of all the chemicals and toxins in crumb rubber. No one can tell you with certainty that crumb rubber is safe. So should we send our children through the minefield anyway? Are you willing to send them through the minefield?

You hold the lives of the children of Connecticut in your hands. Please vote your conscience. Thank you